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Mineral Industry Surveys

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LEAD IN AUGUST 2003

Domestic mine production, based on the net quantity of lead recovered from concentrate, decreased by 8% in August compared with production in July. Secondary refinery production increased by about 1% in August, and reported consumption increased by about 4% compared with the previous month.

According to Platts Metals Week published quotations for August, the average North American producer price and the average London Metal Exchange cash price (U.S. dollars) decreased by 0.14% and 3.54%, respectively.

Demand for lead in North America increased in August as economic recovery in the United States began to show signs of accelerating. Industry observers were optimistic that an increase in business investment in the coming months would continue to strengthen the lead market. In Europe, similar signs of economic recovery were evident as manufacturing activity increased for the first time in 5 months. Inventories of refined lead and finished batteries held by consumers were at above average levels in anticipation of an increase in demand in late summer and into the last quarter of the year (CRU International Ltd., 2003).

The National Defense Stockpile aggregated cash disposal (sale) of lead in August under the monthly Basic Ordering Agreement of the Defense Logistics Agency, DLA-Lead-005, was 560 metric tons (t) (617 short tons). Sales in the first 11 months of fiscal year 2003 (October 2002 through August 2003) totaled 54,473 t (60,046 short tons). The August sale exhausted the lead available for purchase under the fiscal year 2003 Annual Materials Plan.

The U.S. Environmental Protection Agency (EPA) issued a solicitation to States, Territories, Indian Tribes, Intertribal Consortia, and the District of Columbia for entry into cooperative agreements with the agency in support of their respective lead-based paint abatement programs. Funds made available by the EPA for these agreements total $12.5 million. The lead-based paint programs and the financial assistance offered under the cooperative agreements are authorized under section 404 of the Toxic Substance Control Act. The local programs are conducted in lieu of the corresponding Federal programs. They are intended to insure that individuals conducting lead-based paint activities are properly trained and certified, and that renovation contractors provide appropriate lead information to building owners and residents (U.S. Environmental Protection Agency, 2003).

In Australia, Consolidated Broken Hill Ltd. (CBH) planned to resume production of lead and zinc concentrates following acquisition of the Elura Mine, New South Wales, from Pasminco Ltd. in mid-September. CBH anticipates investing sufficient capital to increase the existing mine life by about 4.5 years, effectively doubling the life of the mine. At current throughput rates, the Elura Mine can yield enough concentrate to produce 73,000 t of zinc and 42,000 t of lead per year (American Metal Market, 2003).

Update

The International Lead and Zinc Study Group (ILZSG) held its 48th session in Rome, Italy, from October 8-10, at which time ILZSG reported its outlook for lead in 2003 and 2004. World usage of refined lead was forecast to rise by 0.9% in 2003 and by 2.4% in 2004. It is anticipated that European consumption of lead will fall by 1.9% in 2003 and then rise by 2.5% in 2004. Demand in the United States is forecast to decline by 3.5% in 2003 and a further 2.3% in 2004. Some of this decline is attributed to the rising number of imports of finished automotive batteries, as well as to the increased longevity of automotive batteries. In China, further rises in the vehicle fleet, increased exports of automotive batteries, and ongoing investment in the telecommunications and information technology sectors are expected to result in a demand growth of 10.5% annually in 2003 and 2004. On the supply side, global lead mine production is expected to rise by 2.8% in 2004 after falling by 1.3% in 2003. The increase in 2004 is due to the cumulative effect of small increases in production in several countries, including Australia, China, India, Ireland, Mexico, and Peru. Global output of refined lead is forecast to fall by 1.4% in 2003, and a further 0.5% in 2004, despite production increases in Asia. The global fall in production is mainly the consequence of the loss of smelting and refining capacity through closures in Europe, the United States, and Australia. ILZSG anticipates that there will be a close balance between

supply and use of refined lead in the Western World during 2003, and a supply deficit of about 130,000 t in 2004 (International Lead and Zinc Study Group, 2003).

References Cited

American Metal Market, 2003, CBH plans immediate production restart at Elura lead-zinc mine: American Metal Market, v. 111, no. 31-5, August 8, p. 6.

CRU International Ltd., 2003, Market Commentary: CRU Monitor—Lead, September, p. 2.

International Lead and Zinc Study Group, 2003, ILZSG October session/forecasts: Rome, International Lead and Zinc Study Group press release, October 10, 4 p.

U.S. Environmental Protection Agency, 2003, Solicitation of applications for lead-based paint program grants; notice of availability of funds: Federal Register, v. 68, no. 158, August 15, p. 48902-48908.

TABLE 1
SALIENT LEAD STATISTICS IN THE UNITED STATES[1]

(Metric tons, lead content, unless otherwise specified)

	2002		2003		
	Year[p]	January - August	July	August	January - August
Production:					
Mine (recoverable)	440,000	302,000	41,300 [r]	38,000	306,000
Primary refinery	262,000	NA	NA	NA	NA
Secondary refinery:					
Reported by smelters/refineries	1,100,000	715,000	93,500 [r]	94,300	734,000
Estimated	--	7,210	944 [r]	952	7,410
Recovered from copper-base scrap[e]	13,500	10,000	1,250	1,250	10,000
Total secondary	1,120,000	735,000	95,700 [r]	96,500	751,000
Stocks, end of period:					
Primary refineries	NA	NA	NA	NA	NA
Secondary smelters and consumers	105,000	86,300	82,700 [r]	83,400	83,400
Imports for consumption:					
Ore and concentrates	6	3	-- [r]	NA	-- [2]
Refined metal	210,000	143,000	11,600	NA	120,000 [2]
Consumption:					
Reported	1,440,000	1,010,000	110,000 [r]	114,000	887,000
Undistributed[e]	--	99,900	10,900 [r]	11,200	87,700
Total	1,440,000	1,110,000	121,000 [r]	125,000	974,000
Exports:					
Ore and concentrates	241,000	149,000	23,800	NA	93,700 [2]
Bullion	256	95	--	NA	369 [2]
Wrought and unwrought lead	43,200	20,300	6,140	NA	47,000 [2]
TEL/TML preparations, based on lead compounds	516	307	33	NA	409 [2]
Exports (gross weight): Scrap	106,000	71,000	6,420	NA	56,000 [2]
Platts Metals Week North American producer price (cents per pound)	43.56	43.60	43.76	43.70	43.62

[e]Estimated. [p]Preliminary. [r]Revised. NA Not available. -- Zero.

[1]Data are rounded to no more than three significant digits, except prices; may not add to totals shown.

[2]Includes data for January - July only; August data were not available at time of publication.

TABLE 2
MONTHLY AVERAGE LEAD PRICES

	North American producer price	LME		Sterling exchange rate
	cents/lb	$/metric ton	£/metric ton	dollars/£
2002:				
August	43.47	422.67	275.02	1.536845
December	43.54	443.22	279.41	1.586295
Year	43.56	452.29	301.96	1.503145
2003:				
June	43.61	467.68	281.59	1.660876
July	43.76	514.38	317.10	1.622100
August	43.70	496.16	311.29	1.593862

Source: Platts Metals Week.

TABLE 3
CONSUMPTION OF PURCHASED LEAD-BASE SCRAP[1]

(Metric tons, gross weight)

Item	Stocks July 31, 2003	Net receipts	Consumption	Stocks August 31, 2003
Battery-lead	17,600 r	95,300	95,900	17,000
Soft lead	W	W	W	W
Drosses and residues	1,400 r	5,470	5,450	1,420
Other[2]	2,170 r	4,430	4,600	2,000
Total	21,100 r	105,000	106,000	20,400
Percent change from preceding month	XX	-1.5	-0.7	-3.6

rRevised. W Withheld to avoid disclosing company proprietary data; included with "Other." XX Not applicable.
[1]Data are rounded to no more than three significant digits; may not add to totals shown.
[2]Includes solder, common babbitt, antimonial lead, cable covering, type metals, and other lead-base scrap not elsewhere classified.

TABLE 4
LEAD, TIN, AND ANTIMONY RECOVERED FROM LEAD-BASE SCRAP
IN AUGUST 2003[1]

(Metric tons)

Product recovered	Secondary metal content		
	Lead	Tin	Antimony
Soft and calcium lead	67,900	--	--
Remelt lead	W	W	W
Antimonial lead	25,700	W	W
Other[2]	W	W	--
Total lead-base	94,300	44	378

W Withheld to avoid disclosing company proprietary data; included in "Total."
-- Zero.
[1]Data are rounded to no more than three significant digits.
[2]Includes cable lead, lead-base babbitt, solder, type metals, and other products.

TABLE 5
CONSUMPTION OF LEAD IN THE UNITED STATES[1]

(Metric tons, lead content)

Uses	2002		2003		
	Year[p]	January - August	July	August	January - August
Metal products:					
Ammunition, shot and bullets	57,600	29,900	3,020	3,330	23,700
Brass and bronze, billet and ingots	2,730	1,020	288	315	1,160
Cable covering, power and communication and calking lead, building construction	3,550	2,210	394	342	3,150
Casting metals	34,800	5,220	447	447	3,580
Sheet lead, pipes, traps and other extruded products	27,900	12,600	1,280	1,410	10,300
Solder	6,450	1,270	196	170	1,420
Storage batteries, including oxides	1,190,000	904,000	96,900	100,000	790,000
Terne metal, type metal, and other metal products[2]	24,600	1,000	3	4	45
Total metal products	1,350,000	957,000	103,000	106,000	833,000
Other oxides and miscellaneous uses	86,200	53,300	7,270 [r]	7,250	53,700
Total reported	1,440,000	1,010,000	110,000 [r]	114,000	887,000
Undistributed consumption[e]	--	99,900	10,900 [r]	11,200	87,700
Grand total	1,440,000	1,110,000	121,000 [r]	125,000	974,000

[e]Estimated. [p]Preliminary. [r]Revised. -- Zero.

[1]Data are rounded to no more than three significant digits; may not add to totals shown.

[2]Includes lead consumed in foil, collapsible tubes, annealing, plating, galvanizing, and fishing weights.

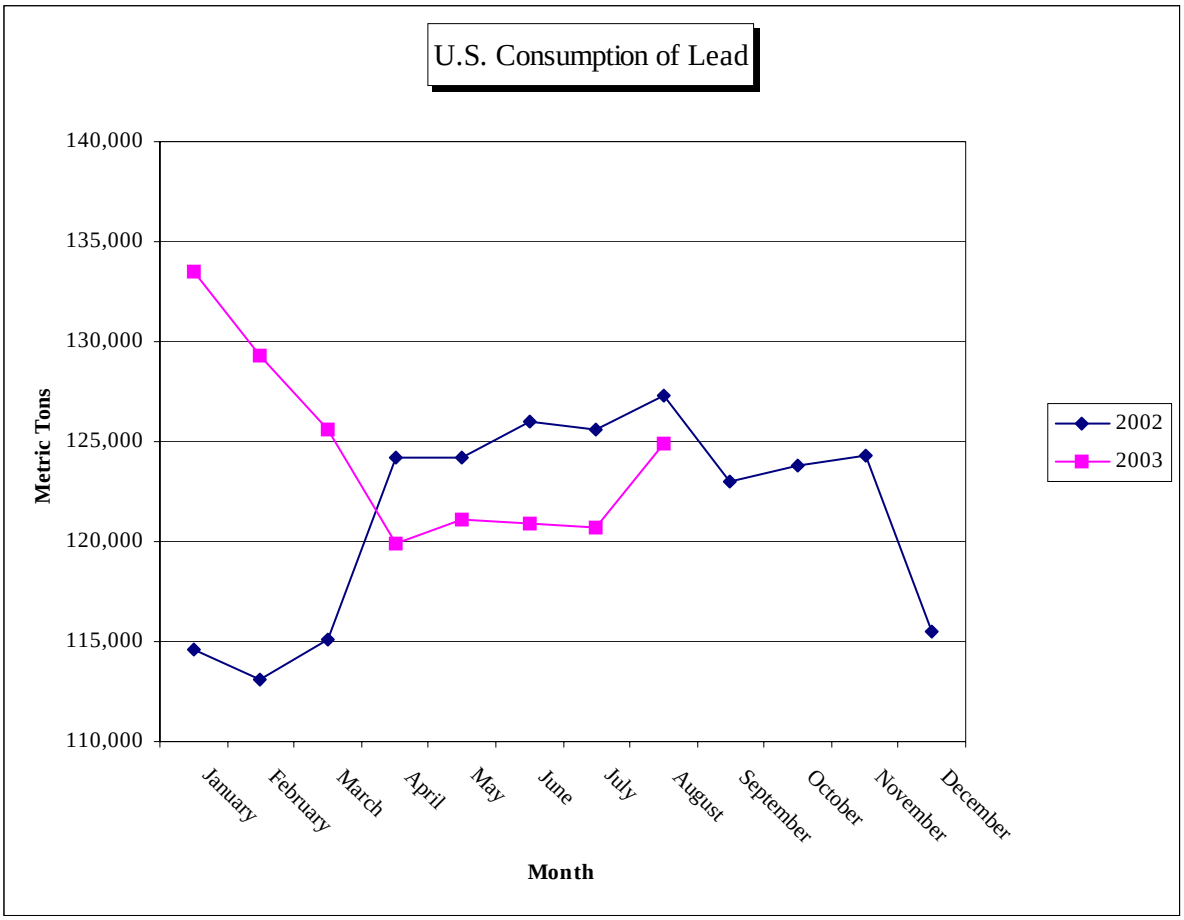

TABLE 6
CONSUMER AND SECONDARY SMELTER STOCKS, RECEIPTS,
AND CONSUMPTION OF LEAD[1]

(Metric tons, lead content)

Type of material	Stocks July 31, 2003	Net receipts	Consumption	Stocks August 31, 2003
Soft lead	40,100	63,400	63,600	39,800
Antimonial lead	29,400	26,800	25,900	30,200
Lead alloys	W	23,900	23,900	W
Copper-base scrap	W	64	68	W
Total	82,700 [r]	114,000	114,000	83,400

[r]Revised. W Withheld to avoid disclosing company proprietary data; included in "Total."
[1]Data are rounded to no more than three significant digits; may not add to totals shown.

TABLE 7
U.S. EXPORTS OF LEAD, BY CLASS[1]

(Metric tons)

	2002		2003		
	Year	July	June	July	January - July
Lead content:					
Ore and concentrates	241,000	106,000	9,040	23,800	93,700
Bullion	256	95	--	--	369
Materials excluding scrap	43,200	16,800	6,890	6,140	47,000
TEL/TML preparations, based on lead compounds	516	277	23	33	409
Total	285,000	124,000	16,000	29,900	141,000
Gross weight: Scrap	106,000	62,200	7,720	6,420	56,000

-- Zero.
[1]Data are rounded to no more than three significant digits; may not add to totals shown.

Source: U.S. Census Bureau.

TABLE 8

U.S. IMPORTS OF LEAD BY TYPE OF MATERIALS AND BY COUNTRY OF ORIGIN[1]

(Metric tons, lead content)

	General imports					Imports for consumption				
	2002		2003			2002		2003		
Country of origin	Year	January - July	June	July	January - July	Year	January - July	June	July	January - July
Ore, matte, etc.:										
Other	6	3	-- [r]	--	-- [r]	6	3	-- [r]	--	-- [r]
Total	6	3	-- [r]	--	-- [r]	6	3	-- [r]	--	-- [r]
Base Bullion:										
Other	--	--	1	--	1	--	--	1	--	1
Total	--	--	1	--	1	--	--	1	--	1
Pigs and bars:										
Australia	43,700	22,400	--	--	10,100	2,630	2,630	--	--	--
Canada	172,000	100,000	18,600	11,200	114,000	172,000	100,000	18,600	11,200	114,000
China	28,200	28,200	--	--	1	28,200	28,200	--	--	1
Germany	185	161	--	--	--	185	161	--	--	--
Mexico	7,460	3,620	471	391	6,240	7,460	3,620	471	391	6,240
Other	246	166	24	--	82	94	14	24	--	82
Total	251,000	155,000	19,100	11,600	130,000	210,000	135,000	19,100	11,600	120,000
Reclaimed scrap, including ash and residues	--	--	--	--	--	--	--	--	--	--
Grand total	251,000	155,000	19,100	11,600	130,000	210,000	135,000	19,100	11,600	120,000

[r]Revised. -- Zero.

[1]Data are rounded to no more than three significant digits; may not add to totals shown.

Source: U.S. Census Bureau.